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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,713	04/19/2007	Yoshihito Ohkawa	1000023-000114	3547
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EXAMINER				
LEE, DORIS L				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
08/25/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

### Office Action Summary

**Application No.**

10/587,713

**Applicant(s)**

OHKAWA, YOSHIHITO

**Examiner**

Doris L. Lee

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4-8 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-8 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 07222009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 17, 2009 has been entered.

### ***Claim Objections***

2. **Claim 1** is objected to because of the following informalities: the limitation which reads "...one other salt of zinc selected from zinc phosphate..." should be amended to read "...one other salt of zinc selected from *the group consisting of* zinc phosphate..." in order for the claim to be in proper Markush language. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 4-8 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ouchi (JP 2001-220441, please refer to the machine translation)** in view of **Chaplin (US 5,338,791)**.

**Regarding claims 1 and 15**, Ouchi teaches a flame retardant polyamide ([0001]) composition which comprises:

- 20 to 80% by mass of a polyamide ([0010])
- 5 to 40% by mass of a brominated flame retardant ([0010])
- 0.1 to 10 % by mass of a zinc compound ([0038]) such as zinc borate or zinc stannate ([0038])
- 0 to 60 % by mass of a reinforcing material ([0010])
- 0.1 to 10% by mass of a drip preventing agent ([0040])

However, Ouchi fails to teach that the zinc compounds such as zinc borate and zinc stannate can be used as a mixture and in a ratio of 1:1.

Chaplin teaches a polyamide composition (Abstract) which comprises a brominated flame retardant (col. 2, lines 35-40) and also contains a mixture of zinc borate and zinc stannate in a 1:1 ratio (col. 1, lines 63-65).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the mixture of zinc borate and zinc stannate in a 1:1 ratio as taught by Chaplin as the zinc compound of Ouchi. One would have been motivated to do so in order to receive the expected benefit of achieving a synergistic fire retardant effect (Chaplin, col. 2, lines 40-45). They are combinable because they are concerned with the same field of endeavor, namely polyamides with halogenated flame retardants and zinc compounds.

**Regarding claim 4**, Ouchi teaches that the polyamide (A) comprises:100% by mole of recurring units comprising a dicarboxylic acid component unit (a-1) consisting of

30 to 100% by mole of a terephthalic acid component unit, 0 to 70% by mole of an aromatic dicarboxylic acid component unit other than terephthalic acid, and/or 0 to 70% by mole of an aliphatic dicarboxylic acid component unit having 4 to 20 carbon atoms (provided that the total amount of these dicarboxylic acid component units is 100% by mole), and a diamine component unit (a-2) consisting of an aliphatic diamine component unit and/or an alicyclic diamine component unit ([0010]).

**Regarding claims 5**, Ouchi teaches that the polyamide (A) comprises 50 to 100% by mole of 1,6-diaminohexane with respect to the diamine component unit, and has a melting point in the range of 290 to 350°C, and an intrinsic viscosity  $[\eta]$ , as measured in a concentrated sulfuric acid at 25°C, in the range of 0.5 to 3 dl/g ([0019], [0025] and [0026]).

**Regarding claims 6 and 7**, Ouchi teaches that a molded product, namely a connector, can be made with the composition as recited in claim 1 ([0001]).

**Regarding claim 8**, given that modified Ouchi teaches all the components of composition, it is therefore inherent that the prior art composition has the desired properties as listed in the present claim since such properties are evidently dependent upon the nature of the composition used. Case law holds that a material and its properties are inseparable. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

### ***Response to Arguments***

5. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Since the Ouchi reference has been carried over from the preceding action, it is appropriate to address applicant's arguments concerning it.

**Applicant's argument:** Ouchi does not teach the combination of the two zinc compounds in the ratio as required by the claim limitations.

**Examiner's response:** *A secondary reference, Chaplin, US 5,338,791, addresses this issue and the rejection is set forth above.*

#### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doris L. Lee whose telephone number is (571)270-3872. The examiner can normally be reached on Monday - Thursday 7:30 am to 5 pm and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Doris L Lee/  
Examiner, Art Unit 1796

/Vasu Jagannathan/  
Supervisory Patent Examiner, Art Unit 1796